UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,044	02/14/2002	Kang Chun Un	Q67312	7599

7590 09/22/2005	**EXAMINER**
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC	LEMMA, SAMSON B
2100 Pennsylvania Avenue, N.W.	
Washington, DC 20037-3213	

ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *14 February 2002*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *6*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   <u>**Claims 1-14**</u> have been examined.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119 (a)-(d), which papers

have been placed of record in the file.

Specification

3.   The disclosure is objected because of the following informalities:

- On page 4, lines 12-16, the following has been recited "(c) combining and

decrypting the synchronizing information stored in the predetermined places and

determining whether **the combined synchronizing information** and **the decrypted**

synchronizing information is substantially identical **to the synchronizing**

information stored in the database." This is not only vague but also ambiguous. It is

ambiguous because it could also mean that, two different values which are "**combined**

synchronizing information" and "the decrypted synchronizing information" are

compared with the synchronizing information stored in the database. However as far as

what is disclosed on page 3, lines 11-14 is concerned, there is only one value which is

the result of **the combined and decrypted synchronizing information** which is

compared with value of the synchronizing information stored in the database.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing
> out and distinctly claiming the subject matter which the applicant regards as his
> invention.

5.   **Claim 1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 1 recites the following, "**combining and decrypting the**

synchronizing information stored in the predetermined places and determining

whether the combined synchronizing information and the decrypted

synchronizing information is substantially identical to the synchronizing

information stored in the database". This is not only vague but also ambiguous. It is

ambiguous because it could also mean that, two different values which are "**combined**

synchronizing information" and "the decrypted synchronizing information" are

compared with the synchronizing information stored in the database. However as far as

what is disclosed on page 3, lines 11-14 is concerned, there is only one value which is

the result of **the combined and decrypted synchronizing information** which is

compared with value of the synchronizing information stored in the database. The

examiner interpreted the above limitation as it has been disclosed on the disclosure, on

page 3, lines 11-14.

6.   **Claim 1 and 8** is also rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. Claim 1, recites the term "substantially". This term is a relative term and does not have a clear and well defined meaning.

7.   **Claims 2-8** depend from the rejected claim 1, and include all the limitations of the respective claims, thereby rendering those dependent claims indefinite.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   **Claims 1-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasai (hereinafter refereed as **Kasai**) (US Publication No. 2001/0021251) in view of Nagashima, Takayuki (hereinafter refereed as **Nagashima**)(**European patent No. EP 0851629 A2 (Publication date 07/01/1998)**

10.   **As per claims 1, 9-13 Kasai discloses a method for storing and securely managing important information for a user in a database**, [Paragraph 0015] (It is another object of the present invention to examine alteration and forgery of image file data in a storage medium and to improve the reliability of image output from a storage medium) **comprising:**
Storing synchronizing information, which changes when a portion of the important information is updated, in the database together with the important information, and encrypting the synchronizing information;

Storing the encrypted synchronizing information in a predetermined places;

[Paragraph 0130] (Next, a message digest value of the image file data to be signed is calculated (Step S1308) and encrypted by using the secret key "Step S1309", and the encrypted message digest value is stored as a signature in the memory card "Step S1310").

Decrypting the synchronizing information stored in the predetermined places and determining whether the combined synchronizing information and the decrypted synchronizing information is identical to the synchronizing information stored in the database. [Paragraph, 0178] (As described so far, according to the present invention, when image file data with a signature stored in a storage medium and transferred to an image processing system is output, a message digest value of the image file data calculated in the image processing system by using a one-way function is compared with a value obtained by decrypting the signature by using the public key. It is therefore possible to reliably check whether the image file data was altered or not and to considerably improve the reliability of an image stored in the storage medium.)

Kasai does not explicitly disclose,

Distributively storing data in a plurality of predetermined places and combining the data and decrypting the data.

However, in the same field of endeavor, **Nagashima** discloses

• Storing the key data distributively in a plurality of predetermined places and combining/collecting a predetermined number of pieces of information/data which are distributively stored and perform decryption.[Page 4, lines 9-10]

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features of storing data/information distributively on a

plurality of predetimined places and combining them and perform decryption as per teachings

of **Nagashima in to the method of securely managing important information for a user in**

a database by examining alteration and forgery of data in a storage medium/database as

taught by **Kasai in order to protect and secure important information in the**

database/storage medium.

11.   **As per claim 2 the combination of Kasai and Nagashima** discloses a method for

storing and securely managing important information for a user in a database as applied to

claims above. Furthermore **Kasai** discloses the method, wherein the encrypting comprises

encrypting key-data used for encrypting and decrypting the synchronizing information.

[Paragraph 0130 & 0178]

12.   **As per claim 3 the combination of Kasai and Nagashima** discloses a method for

storing and securely managing important information for a user in a database as applied to

claims above. Furthermore **Nagashima** discloses the method, wherein the distributively storing

the encrypted synchronizing information comprises distributively storing key-data in said

predetermined places. [Page 4, line 6; figure 1, ref "11b, 11c and 11d]

13.   **As per claim 4 the combination of Kasai and Nagashima** discloses a method for

storing and securely managing important information for a user in a database as applied to

claims above. Furthermore **Kasai** discloses the method, wherein the encrypting the

synchronizing information comprises encrypting the updated important information.

[Paragraph 0130 & 0178]

14.   **As per claim 5 the combination of Kasai and Nagashima** discloses a method for

storing and securely managing important information for a user in a database as applied to

claims above. Furthermore **Kasai** discloses the method, wherein the encrypting the

synchronizing information comprises encrypting key data used for encrypting and decrypting

the important information. [Paragraph 0130 & 0178]

15.   **As per claim 6-7 the combination of Kasai and Nagashima** discloses a method for

storing and securely managing important information for a user in a database as applied to

claims above. Furthermore **Nagashima** discloses the method, wherein the distributively storing

the encrypted synchronizing information comprises distributively storing the encrypted key-

data in predetermined places. [Page 4, lines 4-10, figure 1, ref "11b, 11c and 11d]

16.   **As per claim 8 & 14 the combination of Kasai and Nagashima** discloses a method for

storing and securely managing important information for a user in a database as applied to

claims above. Furthermore **Kasai** discloses the method, wherein the combining, decrypting and

determining step comprises combining and decrypting the important information stored in the

predetermined places and determining whether the decrypted important information is

identical to the important information stored in the database. [Paragraph, 0178] (As described

so far, according to the present invention, when image file data with a signature stored in a

storage medium and transferred to an image processing system is output, a message digest

value of the image file data calculated in the image processing system by using a one-way

function is compared with a value obtained by decrypting the signature by using the public

key. It is therefore possible to reliably check whether the image file data was altered or not and

to considerably improve the reliability of an image stored in the storage medium.)

Conclusion

17.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. (See PTO-Form 892).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Samson B Lemma whose telephone number is 571-272-3806. The

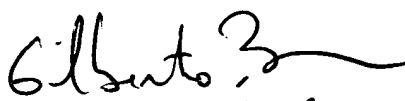examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, BARRON JR GILBERTO can be reached on. The fax phone number for the

organization where this application or proceeding is assigned is 571-272-3799.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAMSON LEMMA

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09/14/2005

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